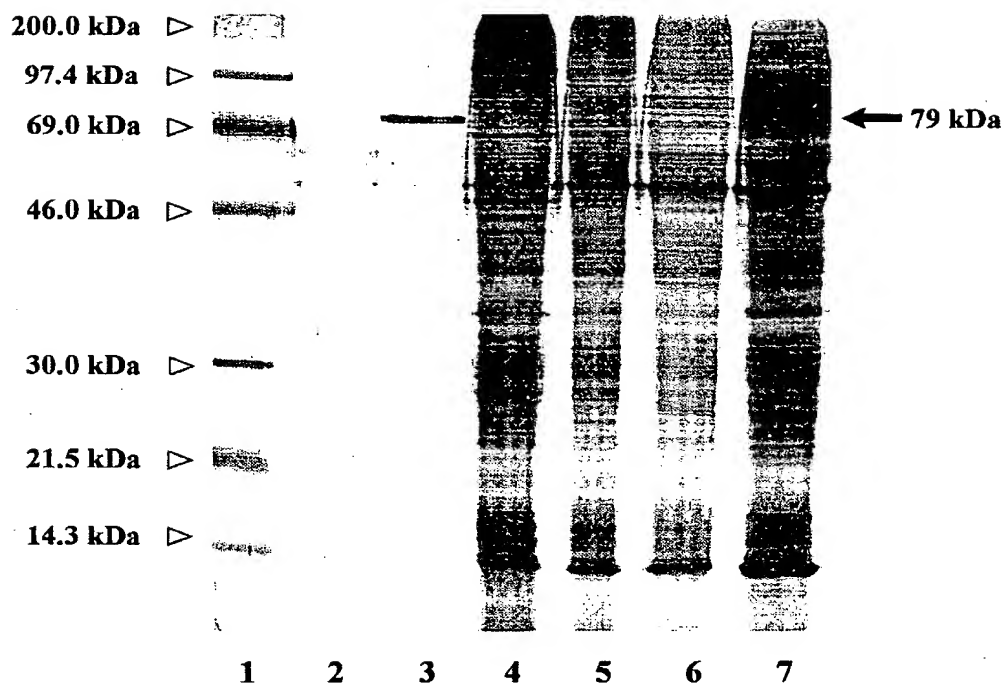




1/20

FIG. 1



2/20

FIG. 2

Peptide 1 KVTIFFGTQK

Peptide 2 KVVDLDDYAADDDEFEEK
E

Peptide 3 KWFTEVAK
D

Peptide 4 KVVDEIIVEK

Peptide 5 KYADLLNFPK

Peptide 6 KAALHALAK

Peptide 7 KDVHRTLHTIVQEQGSLDSSK

3/20

FIG. 3

Arabidopsis thaliana .. 350 GSPLES-AVPPFPGPCT
Catharanthus roseus .. 389 GTPLAGSSLPPFP-PCT
Helianthus tuberosus .. 331 GTPLGGPTLQPPFP-PCT
Vigna radiata .. 366 GTSLGG-SLLPPFPGPCS
Vicia sativa .. 367 GTSLGG-SLLPPFPGPCT
* . * .. **** **.

—————→

LGTGLARYADLLNPPRKSALVALAAYATEPSEARKLKHLTSPDGKD
LRTALTRYADLLNTPKKSALLALAAYASDPNEADRLKYLASPAGKD
LRKALTNYADLLSSPKKSTLLALAAEASDATEADRLQFLASREGKD
LRTALARYADLLNPPRKAALLALATEASEPS-DKRLXFLSSPQGKD
VRTALACYADLLNPPRKAIVALAAHASEPSEARRLKFLSSPQGKD
. * ***** * . * . *** * . * ** ***

EYSQWIVASQRSLLLEVMAAFPSAKPPLGVFFAAIAPRLQPRYYSIS
EYAQSLVANQRSLLLEVMAEFPSAKPPLGVFFAAIAPRLQPRFYSIS
EYAEWIVANQRSLLLEVMEAFPSAKPPLGVFFAAIAPRLQPRYYSIS
EYSKWVVGVSQRSLLLEVMAEFPSAKPPLGVFFAAIAPRLQPRYYSIS
EYSKWVVGVSQRSLLLEVMAADFPSAKPPLGVFFAAIAPRLQPRYYSIS
** . * ***** . *** ***** . ****

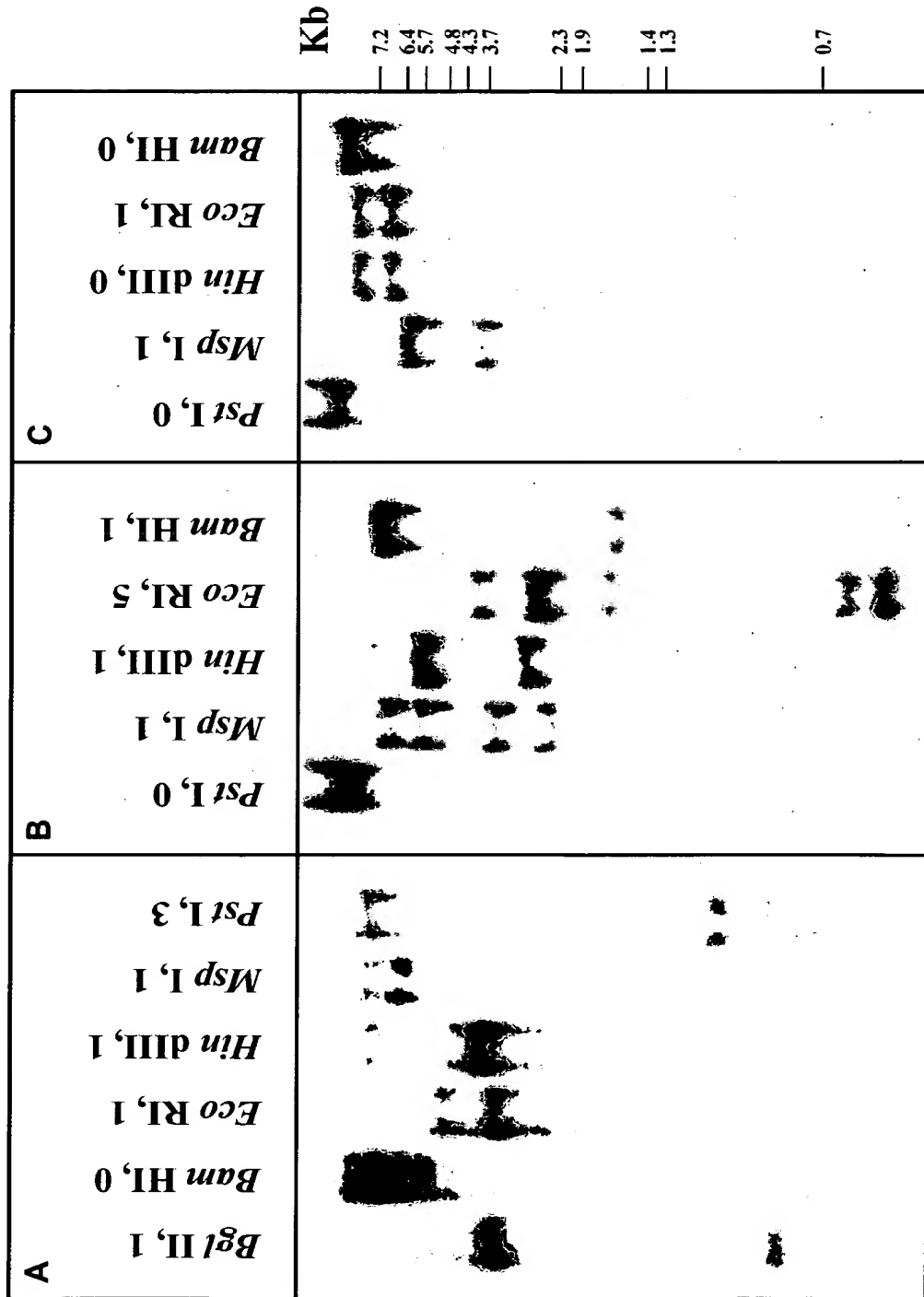
←—————

SCQDWAPSRVHVTSALVYGPTPTGRIHKGVCSTWMKNAVP 498..
SSPRMAPSRIHVTCALVYEKTPGGRIHKGVCSTWMKNAIP 537..
SSPKMVPNRIHVTCALVYEKTPGGRIHKGICSTWMKNAVP 479..
SSPRFAPQRVHVTCALVYGPTPTGRIHKGVCSTWMKNAIP 513..
SSPRFAPQRVHVTCALVEGPTPTGRIHKGVCSTWMKSATP 515..
* . * * . *** . *** ** ***** . ***** * *

←—————

4/20

FIG. 4



5/20

FIG. 5

1	MEQTAVKVSL	FDLFSSILNG	KLDPSNFSSD	SSAAILIENR	50
	MGSNNLANSI	ESMLG.ISIGSEYISD	P.....	EILMILTtai
	*	*	*	*	.IFIMVTTVA
					* **
51					100
	AVFIGCGFLY	VWRRSSNKSS	KIVETQKLIV	EKEPE.PEVD	DGKKKVtIFF
	SMLIGFGFFV	CMK.SSSSQS	KPIETYKPII	DKEEEEIEVD	PGKIKLtIFF
	** **	** *	* ** *	* ** *	* ** *
101					150
	GTQTGTAEgf	AKALAEeAKA	RYEKaIFKVI	DLDDYGADDD	EFEEKLKKET
	GTQTGTAEgf	AKALAEeIKA	KYKKAVVKVV	DLDDYAAEDD	QYEEKLKKES
	*****	*****	* ** *	*****	*****
151					200
	IALFFLATYg	DGEPTDNAAR	FYKWFTEGKE	REMWLQNLQF	GVFGLGNRQY
	LVFFMVATYg	DGEPTDNAAR	FYKWFtQEHE	RGEWLQQLTY	GVFGLGNRQY
	* ****	*****	*****	* ****	*****
201					250
	EHFNKVAKEV	DEILTEQGGK	RIVPVGLGDD	DQCIEDDFTA	WRELvWPELD
	EHFNKIAVDV	DEQLGKQGAK	RIVQVGLGDD	DQCIEDDFTA	WRELLWTELD
	*****	** *	*****	*****	*****
251					300
	QLLLDESdKT	SVSTPYTAIV	PEYRVVFHDA	TDASLQDKNW	SNANGYTVYD
	QLLKDEDAAP	SVATPYIATV	PEYRVVIHET	TVAALDDKHI	NTANGDVAFD
	*** **	** ****	*****	* ** *	*** *
301					350
	VQHPCrANVV	VKKELHTPVs	DRScIHLEFD	ISGTGLTYET	GDHVGvYSEN
	ILHPCRTIVA	QQRELHKPKS	DRScIHLEFD	ISGSSLTYET	GDHVGvYAEN
	**** *	*** **	*****	*** *****	***** *
351					400
	CVEVVEEAER	LLGYSSDTVF	SIHVDKEDGS	PISGSALAPP	FPTPCTLRtA
	CDETVEEAGK	LLGQPLDLLF	SIHTDKEDGS	PQGSS..LPP	FPGPCTLRSA
	* * ****	*** * *	*** *****	* * **	* * **** *
401					450
	LTRYADLLNS	PKKAALHALA	AYASDPKEAE	RLRYLASPAG	KDEYAQWIVA
	LARYADLLNP	PRKASLIALS	AHASVPSEAE	RLRFLSSPLG	KNEYSKWVVG
	* *****	* ** *	* ** *	*** ** *	* ** *
451					500
	SQRSLLVVMA	EFPSAKaPIG	VFFAAVAPRL	LPRYYSISSS	NRMVPSRIHV
	SQRSLLEIMA	EFPSAKPPLG	VFFAAVAPRL	PPRYYSISSS	PKFAPSRIHV
	***** **	***** *	*****	*****	*****
501					550
	TCALVHEKTP	AGRVHKGVCs	TWMKNSVSLE	ENHDCSSWAP	IFVRQSNFKL
	TCALVYGQSP	TGRFHRGVCS	TWMKHAVPQD	S.....WAP	IFVRTSNFKL
	***** *	* ** ****	**** *	***	*****
551					600
	PADSTVPIIM	IGPGTGLAPF	RGFMQERLAL	KNSGVELGPA	ILFFGCRNRQ
	PADPSTPIIM	VGPGTGLAPF	RGFLQERMAL	KENGAQLGPA	VLFFGCRNRN
	*** ****	*****	*** ** *	* * ****	*****
601					650
	MDYIYEEELN	NFVKEGAISE	VVVAFSREGA	TKEYVQHKMA	EKASYIWEMI
	MDFIYEDELN	NFVERGVISe	LVIAFSREGE	KKEYVQHKMM	EKATDVWNVI
	** *** **	*** * **	* *****	*****	*** * *
651					700
	SQGAYLYVCG	DAKGMArDVH	RTLHTIAQEQ	GSLDNSKTES	LVKNLQMDGR
	SGDGYLYVCG	DAKGMArDVH	RTLHTIAQEQ	GSMESSAAEA	AVKKLQVEER
	* *****	*****	*****	** * *	* ** *
701					
	YLRDVW				
	YLRDVW				

6/20

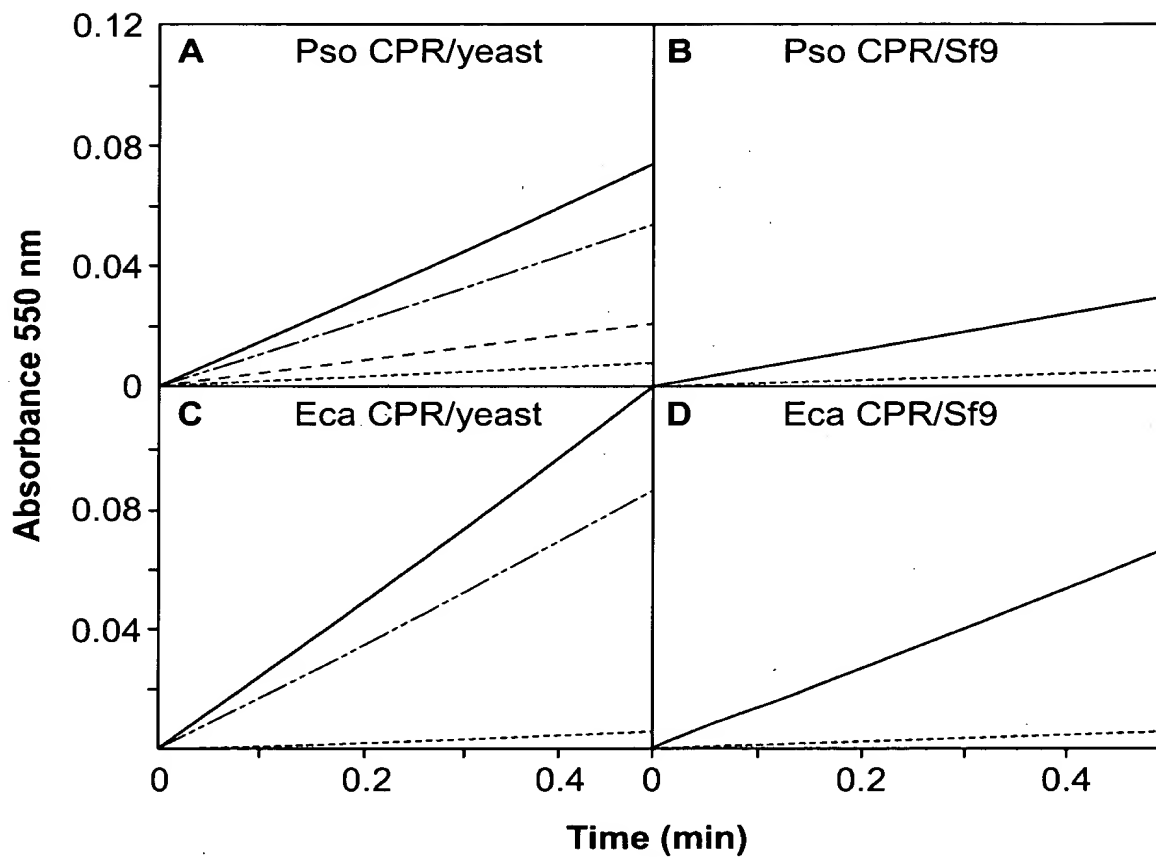
FIG. 6a

CGGCACGAGCTTGTTAGTATCTTCTAGGGTTTGAAAGAAGCAGGGGAGCAAGCAAAAGTCGAATCTACTTGAAATACAT
TCGATTGCTTCTCTGTTTAAGCTTCAGAGTCTCTGCTAATTATGGGTTCGAATAAATTTAGCTAATTCGATTGAATCGA
TGTTAGGAATATCAATAGGATCAGAATATATTTCTGACCCAATTTTCATTATGGTCACAACCTAGCTTCAATGCTGATT
GGATTGGTTTCTTCGCATGTATGAATCTTCGTCTTCTCAATCAAAACCTATTGAAACCTTATAAACCAATAATTGATAA
AGAAGAAGAGGAGATTGAAGTTGATCTCTGGTAAATTAAGCTCACTATATTTTTTGGTACTCAGACTGGTACTGCTGAAG
GATTTGCTAAGGCATTGGCAGAAGAAATTAAGGCAAGTACAAGAAAGCAGTTGTTAAAGTAGTTGACCTGGATGACTAT
GCAGCCGAGGATGATCAATATGAAGAGAAATTAAGAAAGAGTCTTTGGTGTTCATGGTAGCCACTTATGGTGATGG
TGAGCCAAC TGACAATGCTGCGAGATTTTACAAATGGTTCACTCAGGAACATGAAGGGGAGAGTGGCTTCAGCAACTAA
CTTATGGTGTTTTGGTTTGGTTAACCGTCAATACGAGCATTTCAACAAGATCGCGGTAGATGTGGATGAGCAACTCGGT
AAACAAGGTGCAAGCGCATTTGTTCAAGTGGGCTCGGTGACGATGATCAATGCAATGAAGATGATTTTACTGCTTGGCG
AGAATTGTTGTGACTGAATTGGATCAGTTGCTCAAGATGAGGATGCTGCTCCTTCAGTGGCTACACCGTATATTGCTA
CTGTTCTGAATACAGGGTAGTGATTCACGAACTACGGTCGCGGCTCTGGATGATAAACACATAAATACTGCTAACGGC
GATGTTGCATTTTGATATTCTCCATCTTGCAGAACCATTTGTTGCTCAACAAGAGAGCTCCACAAACCCCAAGTCTGATAG
ATCCTGTATACATCTGGAGTTCGACATATCAGGCTCTTCCCTTACATATGAGACTGGAGATCATGTTGGTGTATTGCTG
AGAACTGCGATGAACCTGTCAGGAAGCAGGGAAGCTGTGGGTCAACCCCTGGATTGCTGTTTTCAATTCACACGGAT
AAAGAAGACGGGTCAACCCAGGGAAGCTCATTAACACCTCCTTTCCAGGTCTTGCACCTTACGATCTGCCCTAGCACG
CTATGCTGATCTTTTGAATCCTCTAGAAAGGCTTCTGATGCTCTGCTCCGCTCATGCACTGTACCCAGTGAAGCAG
AGAGATTGCGCTTTTGTGTCATCACCCTCTGGGAAGAAATGAGTATCAAAATGGGTAGTTGGAAGTCAGAGGAGTCTTTTG
GAGATCATGGCCGAGTTTCCATCAGCAAAACCCCTCTTGGTGTCTTTGCTGCAAGTACGCTCGCTTACCGCTCG
ATACTATTCTATCTCATCTCCTAAGTTTGTCTCCCTCAAGAAATTCATGTGACGTGTGCTTTAGTATATGTTCAAGCC
CTACCGGAAGGTTTACCGAGGAGTGTGTTGACATGGATGAAGCATGCAGTTCCTCAGGATAGCTGGGCTCCTATTTT
GTTCCGAACGTCAAACCTCAAGTTACAGCTGACCCCTCAACTCCAATTATCATGGTGGGACCTGGTACAGGGTTAGCTCC
TTTCAGAGGATTTCTGCAGGAAACAATGGCCCTCAAGGAAATGGTGCTCAACTTGGCCCAAGCAGTCTTTTTTCGGAT
GTAGGAATCGTAATATGGACTTCATTTATCAAGACGAACATAACAACCTTCGTGGAACGAGGAGTAATTTTCGGAGCTAGTT
ATTGCTTTTTCACGTGAAGGGGAAAGGAATATGTTCAACATAAGATGATGGAGAAGCAACGGATGTATGGAATGT
GATATCAGGGGACGGTTATCTCTATGTGTGGTGATGCCAAGGGAATGGCCAGAGATGTCCATCGCACGTTGCATACCA
TTGCCCAAGAACAAGGACCCTATGGAATCATCTGCTGCCGAAGCTGCAGTAAAGAACTCCAAGTTGAAGAAGCATATCTA
AGAGATGCTGGTGATCGAATGTAGCTTGCCAAAGTCCCTTTTCTGGTGTCTGTTTATGGTTCTATTATATTG
ATCCTCCTCTGAAATCCCAAGCACTTCAGACATCCCTCGATTCTTCTCCAGTGGTTCAAATCGAAGCTCGGTATAA
TTGAGAGCAGTGCAATTGTGACTACATGAGAAGCAACATCGAATACCATAGAAATAGAAAGATCAAAATTCCTTATCA
GAACAATGTTACAGGCAAACTGTGTTTGTCTAATAAATTCACACCCTGGGTGGGAGCAACACTGAAACAGTATTAG
CTATACCAACAAAGTTATGCAAGGAAACAACTAGTAGATCTTCTCTTTGGATTGATTACTGTAAGTTCTAACCCAGA
TGATAGATTGTACTTAAAGATTCTTGTTTTCTTATGGCTACCGAGAGGAGTATATTATGCAATTTAGAGTTTGGAGAAAAA

8/20

FIG. 7

Heterologous Expression of P-450 Reductases



9/20

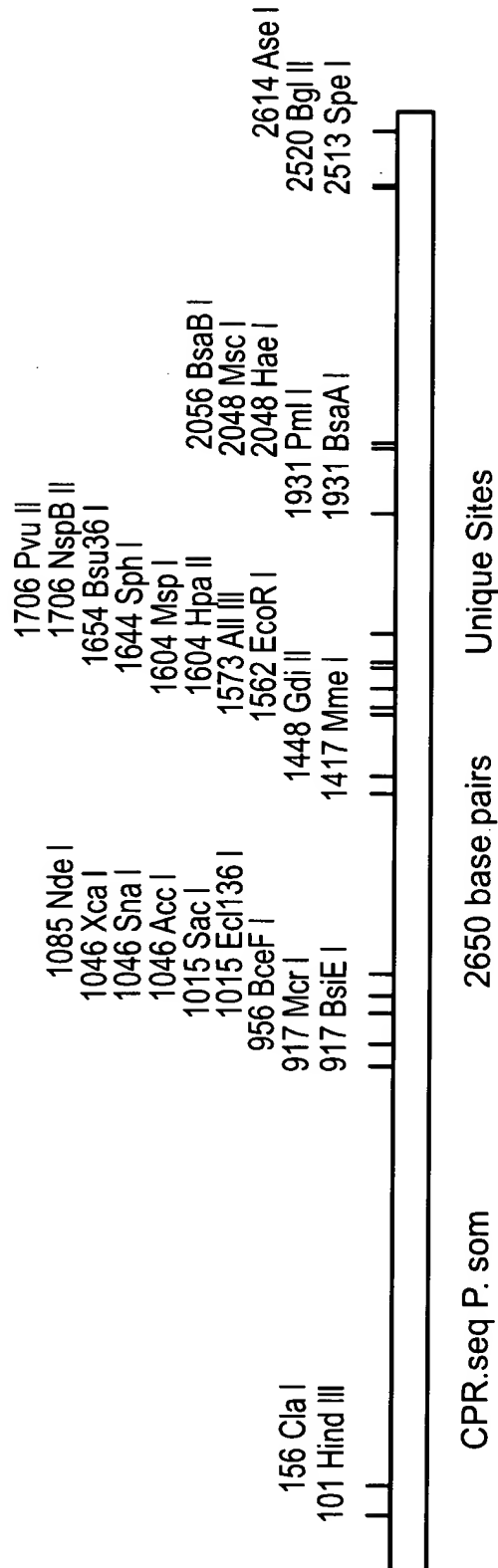


FIG. 8a

10/20

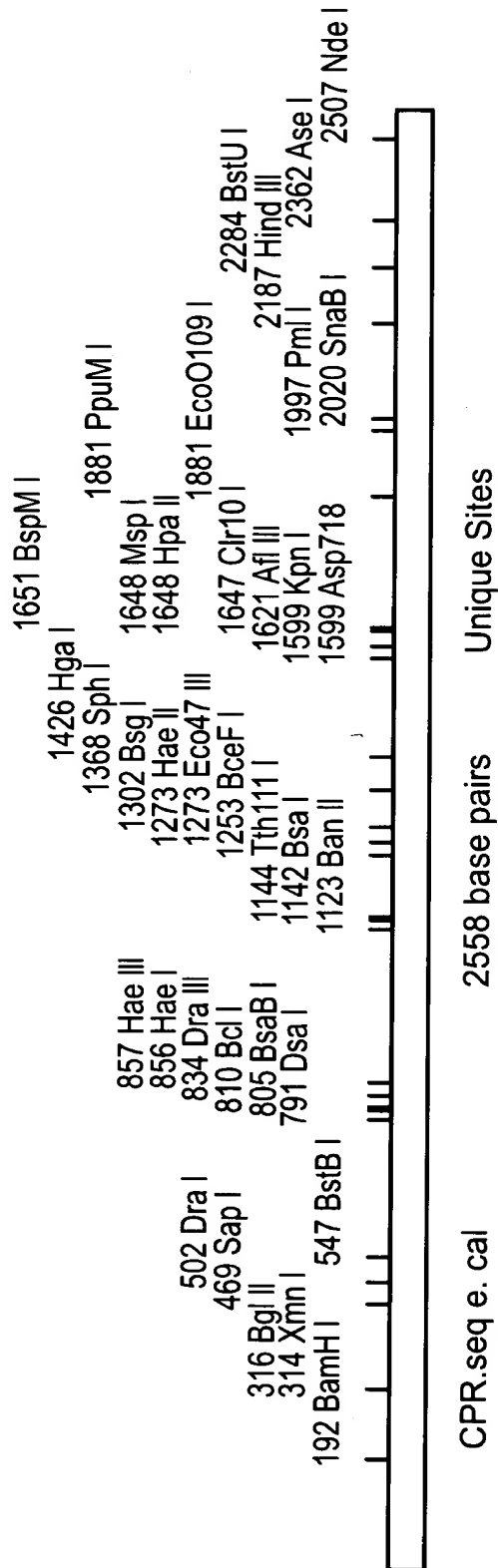


FIG. 8b

11/20

FIG. 9a (1)

1/1	31/11
CGG CAC GAG CTT GTT AGT ATC TTC TAG GGT	TTG AAA AGA AGC ACA GGG AGA AGC AAA AGT
R H E L V S I F * G	L K R S T G R S K S
61/21	91/31
CGA ATC TAC TTG AAA TAC ATT CGA TTG CTT	CTC TCT GTT TAA GCT TCA GAG TCT CTG CTA
R I Y L K Y I R L L	L S V * A S E S L L
121/41	151/51
ATT ATG GGT TCG AAT AAT TTA GCT AAT TCG	ATT GAA TCG ATG TTA GGA ATA TCA ATA GGA
I M G S N N L A N S	I E S M L G I S I G
181/61	211/71
TCA GAA TAT ATT TCT GAC CCA ATT TTC ATT	ATG GTC ACA ACT GTA GCT TCA ATG CTG ATT
S E Y I S D P I F I	M V T T V A S M L I
241/81	271/91
GGA TTT GGT TTC TTC GCA TGT ATG AAA TCT	TCG TCT TCT CAA TCA AAA CCT ATT GAA ACT
G F G F F A C M K S	S S S Q S K P I E T
301/101	331/111
TAT AAA CCA ATA ATT GAT AAA GAA GAA GAG	GAG ATT GAA GTT GAT CCT GGT AAA ATT AAG
Y K P I I D K E E E	E I E V D P G K I K
361/121	391/131
CTC ACT ATA TTT TTT GGT ACT CAG ACT GGT	ACT GCT GAA GGA TTT GCT AAG GCA TTG GCA
L T I F F G T Q T G	T A E G F A K A L A
421/141	451/151
GAA GAA ATT AAG GCA AAG TAC AAG AAA GCA	GTT GTT AAA GTA GTT GAC CTG GAT GAC TAT
E E I K A K Y K K A	V V K V V D L D D Y
481/161	511/171
GCA GCC GAG GAT GAT CAA TAT GAA GAG AAA	TTA AAG AAA GAG TCT TTG GTG TTT TTC ATG
A A E D D Q Y E E K	L K K E S L V F F M
541/181	571/191
GTA GCC ACT TAT GGT GAT GGT GAG CCA ACT	GAC AAT GCT GCG AGA TTT TAC AAA TGG TTC
V A T Y G D G E P T	D N A A R F Y K W F
601/201	631/211
ACT CAG GAA CAT GAA AGG GGA GAG TGG CTT	CAG CAA CTA ACT TAT GGT GTT TTT GGT TTG
T Q E H E R G E W L	Q Q L T Y G V F G L
661/221	691/231
GGT AAC CGT CAA TAC GAG CAT TTC AAC AAG	ATC GCG GTA GAT GTG GAT GAG CAA CTC GGT
G N R Q Y E H F N K	I A V D V D E Q L G
721/241	751/251
AAA CAA GGT GCA AAG CGC ATT GTT CAA GTG	GGG CTC GGT GAC GAT GAT CAA TGC ATT GAA
K Q G A K R I V Q V	G L G D D D Q C I E
781/261	811/271
GAT GAT TTT ACT GCT TGG CGA GAA TTG TTC	TGG ACT GAA TTG GAT CAG TTG CTC AAA GAT
D D F T A W R E L L	W T E L D Q L L K D
841/281	871/291
GAG GAT GCT GCT CCT TCA GTG GCT ACA CCG	TAT ATT GCT ACT GTT CCT GAA TAC AGG GTA
E D A A P S V A T P	Y I A T V P E Y R V
901/301	931/311
GTG ATT CAC GAA ACT ACG GTC GCG GCT CTG	GAT GAT AAA CAC ATA AAT ACT GCT AAC GGC
V I H E T T V A A L	D D K H I N T A N G
961/321	991/331
GAT GTT GCA TTT GAT ATT CTC CAT CCT TGC	AGA ACC ATT GTT GCT CAA CAA AGA GAG CTC
D V A F D I L H P C	R T I V A Q Q R E L
1021/341	1051/351

12/20

FIG. 9a (2)

CAC AAA CCC AAG TCT GAT AGA TCC TGT ATA CAT CTG GAG TTC GAC ATA TCA GGC TCT TCC
H K P K S D R S C I H L E F D I S G S S
1081/361 1111/371
CTT ACA TAT GAG ACT GGA GAT CAT GTT GGT GTT TAT GCT GAG AAC TGC GAT GAA ACT GTC
L T Y E T G D H V G V Y A E N C D E T V
1141/381 1171/391
GAG GAA GCA GGG AAG CTG TTG GGT CAA CCC CTG GAT TTG CTG TTT TCA ATT CAC ACG GAT
E E A G K L L G Q P L D L L F S I H T D
1201/401 1231/411
AAA GAA GAC GGG TCA CCC CAG GGA AGC TCA TTA CCA CCT CCT TTC CCA GGT CCT TGC ACC
K E D G S P Q G S S L P P P F P G P C T
1261/421 1291/431
TTA CGA TCT GCC CTA GCA CGC TAT GCT GAT CTT TTG AAT CCT CCT AGA AAG GCT TCT CTG
L R S A L A R Y A D L L N P P R K A S L
1321/441 1351/451
ATT GCT CTG TCC GCT CAT GCA TCT GTA CCC AGT GAA GCA GAG AGA TTG CGC TTT TTG TCA
I A L S A H A S V P S E A E R L R F L S
1381/461 1411/471
TCA CCT CTG GGA AAG AAT GAG TAT TCA AAA TGG GTA GTT GGA AGT CAG AGG AGT CTT TTG
S P L G K N E Y S K W V V G S Q R S L L
1441/481 1471/491
GAG ATC ATG GCC GAG TTT CCA TCA GCA AAA CCC CCT CTT GGT GTT TTC TTT GCT GCA GTA
E I M A E F P S A K P P L G V F F A A V
1501/501 1531/511
GCC CCT CGC TTA CCG CCT CGA TAC TAT TCT ATC TCA TCC TCT CCT AAG TTT GCT CCC TCA
A P R L P P R Y Y S I S S S P K F A P S
1561/521 1591/531
AGA ATT CAT GTG ACG TGT GCT TTA GTA TAT GGT CAA AGC CCT ACC GGA AGG GTT CAC CGA
R I H V T C A L V Y G Q S P T G R V H R
1621/541 1651/551
GGA GTG TGT TCG ACA TGG ATG AAG CAT GCA GTT CCT CAG GAT AGC TGG GCT CCT ATT TTT
G V C S T W M K H A V P Q D S W A P I F
1681/561 1711/571
GTT CGA ACG TCA AAC TTC AAG TTA CCA GCT GAC CCC TCA ACT CCA ATT ATC ATG GTG GGA
V R T S N F K L P A D P S T P I I M V G
1741/581 1771/591
CCT GGT ACA GGG TTA GCT CCT TTC AGA GGA TTT CTG CAG GAA AGA ATG GCC CTC AAG GAA
P G T G L A P F R G F L Q E R M A L K E
1801/601 1831/611
AAT GGT GCT CAA CTT GGC CCA GCA GTG CTC TTT TTC GGA TGT AGG AAT CGT AAT ATG GAC
N G A Q L G P A V L F F G C R N R N M D
1861/621 1891/631
TTC ATT TAT GAA GAC GAA CTA AAC AAC TTC GTG GAA CGA GGA GTA ATT TCG GAG CTA GTT
F I Y E D E L N N F V E R G V I S E L V
1921/641 1951/651
ATT GCC TTT TCA CGT GAA GGG GAA AAG AAG GAA TAT GTT CAA CAT AAG ATG ATG GAG AAA
I A F S R E G E K K E Y V Q H K M M E K
1981/661 2011/671
GCA ACG GAT GTA TGG AAT GTG ATA TCA GGG GAC GGT TAT CTC TAT GTG TGT GGT GAT GCC
A T D V W N V I S G D G Y L Y V C G D A
2041/681 2071/691

13/20

FIG. 9a (3)

AAG GGA ATG GCC AGA GAT GTC CAT CGC ACG TTG CAT ACC ATT GCC CAA GAA CAG GGA CCC
K G M A R D V H R T L H T I A Q E Q G P
2101/701 2131/711
ATG GAA TCA TCT GCT GCC GAA GCT GCA GTA AAG AAA CTC CAA GTT GAA GAA CGA TAT CTA
M E S S A A E A A V K K L Q V E E R Y L
2161/721 2191/731
AGA GAT GTC TGG TGA TCG AAT GTA GCT TGC CAA GTC CCC TTT TCT TGG CTG GTC TGT TTA
R D V W * S N V A C Q V P F S W L V C L
2221/741 2251/751
TGG TTT CTA TTA TAT TAT TGA TCC TCC TCT GAA AAT CCC AAG CAC TTC CAG ACA TCC CTC
W F L L Y Y * S S S E N P K H F Q T S L
2281/761 2311/771
GAT TCT TCC TCC AGT GGT TCC AAA TCG AAG CTC GGT ATA ATT GAG AGC AGT GCA ATT GTG
D S S S S G S K S K L G I I E S S A I V
2341/781 2371/791
ACT ACA TGA GAA GCA AAC ATC GAA TAC CAT AGA ATT AGA AAG ATC AAA ATT CTC TTA TCA
T T * E A N I E Y H R I R K I K I L L S
2401/801 2431/811
GAA CAA TGT TAC AGG CAA AAC TGT GTT TGC TTA ATA TAA ATT TCA CAC CAT GGG TGT GGA
E Q C Y R Q N C V C L I * I S H H G C G
2461/821 2491/831
CAA CAC TGA AAC AGT ATT AGC TAT ACC AAC AAA GTT ATG CAA GGA AAC ACA AAC TAG TTA
Q H * N S I S Y T N K V M Q G N T N * L
2521/841 2551/851
GAT CTT CTC TTT GGA TTG ATT ACT GTA AGT TCT AAC CAG ATG ATA GAT TGT ACT TAA AGA
D L L F G L I T V S S N Q M I D C T * R
2581/861 2611/871
TTC TTG TTT TCT TAT GGC TAC CGA GAG GAG TAT ATT AAT GCA TTT AGA GTT TTG AGA AAA
F L F S Y G Y R E E Y I N A F R V L R K
2641/881
AAA AAA AAA A
K K K

14/20

FIG. 9b (1)

1/1	31/11
TTC TTC TTC CAA TCG CAT TCG AGA AAA TTC	AAT CAT CTT CAA CTT CAG GAA GAA GAA TCA
F F F Q S H S R K F	N H L Q L Q E E E S
61/21	91/31
TCA GAA ACA CTG AAG CTC ATC ATC ATC CTT	GAA ACT TAT CGT CTT TGT TTG ACC TTT TGA
S E T L K L I I I L	E T Y R L C L T F *
121/41	151/51
AAA ACT ATG GAA CAA ACT GCG GTT AAA GTC	TCT TTG TTT GAT CTA TTT TCT TCG ATA CTT
K T M E Q T A V K V	S L F D L F S S I L
181/61	211/71
AAT GGA AAG TTG GAT CCG TCG AAC TTT TCT	TCA GAT TCA AGT GCT GCT ATT TTG ATT GAA
N G K L D P S N F S	S D S S A A I L I E
241/81	271/91
AAT CGT GAG ATT TTA ATG ATC TTA ACA ACT	GCT ATT GCT GTT TTT ATC GGT TGT GGT TTT
N R E I L M I L T T	A I A V F I G C G F
301/101	331/111
CTC TAC GTT TGG AGA AGA TCT TCA AAT AAG	TCG AGT AAA ATT GTT GAA ACT CAG AAA TTG
L Y V W R R S S N K	S S K I V E T Q K L
361/121	391/131
ATC GTT GAA AAG GAA CCA GAA CCT GAA GTT	GAT GAT GGA AAG AAG AAG GTT ACT ATC TTC
I V E K E P E P E V	D D G K K K V T I F
421/141	451/151
TTT GGT ACT CAA ACT GGT ACA GCT GAA GGA	TTC GCA AAG GCA CTT GCT GAA GAA GCA AAA
F G T Q T G T A E G	F A K A L A E E A K
481/161	511/171
GCA AGA TAT GAA AAG GCA ATC TTT AAA GTG	ATT GAT CTG GAT GAT TAC GGA GCA GAT GAT
A R Y E K A I F K V	I D L D D Y G A D D
541/181	571/191
GAT GAA TTC GAA GAG AAA TTG AAA AAG GAA	ACT ATA GCT CTT TTC TTT TTG GCT ACC TAT
D E F E E K L K K E	T I A L F F L A T Y
601/201	631/211
GGA GAT GGT GAA CCT ACA GAT AAT GCT GCA	AGA TTT TAT AAA TGG TTC ACA GAG GGA GAG
G D G E P T D N A A	R F Y K W F T E G E
661/221	691/231
AGG GAA ATG TGG CTC CAG AAT CTT CAA TTT	GGT GTC TTC GGT CTA GGC AAT AGA CAG TAT
R E M W L Q N L Q F	G V F G L G N R Q Y
721/241	751/251
GAG CAT TTC AAT AAG GTG GCA AAG GAG GTG	GAC GAG ATA CTC ACT GAA CAG GGT GGG AAG
E H F N K V A K E V	D E I L T E Q G G K
781/261	811/271
CGT ATT GTT CCC GTG GGT CTA GGA GAT GAT	GAT CAA TGC ATA GAA GAT GAT TTC ACT GCG
R I V P V G L G D D	D Q C I E D D F T A
841/281	871/291
TGG CGG GAG TTG GTA TGG CCT GAA TTG GAT	CAG TTG CTC CTT GAT GAA AGT GAT AAA ACA
W R E L V W P E L D	Q L L L D E S D K T
901/301	931/311
TCT GTT TCT ACT CCT TAC ACT GCC ATC GTA	CCA GAA TAC AGG GTA GTA TTC CAT GAT GCT
S V S T P Y T A I V	P E Y R V V F H D A
961/321	991/331
ACT GAT GCA TCA CTA CAA GAC AAA AAC TGG	AGC AAT GCA AAT GGC TAC ACT GTT TAC GAC
T D A S L Q D K N W	S N A N G Y T V Y D
1021/341	1051/351

15/20

FIG. 9b (2)

GTT CAA CAC CCA TGC AGA GCC AAT GTC GTT GTA AAG AAG GAG CTT CAC ACT CCA GTA TCT
V Q H P C R A N V V V K K E L H T P V S
1081/361 1111/371
GAT CGT TCT TGT ATT CAT CTG GAA TTT GAC ATT TCT GGC ACT GGG CTC ACG TAT GAA ACA
D R S C I H L E F D I S G T G L T Y E T
1141/381 1171/391
GGA GAC CAT GTC GGT GTT TAC TCT GAG AAT TGT GTT GAA GTT GTC GAG GAA GCA GAG AGG
G D H V G V Y S E N C V E V V E E A E R
1201/401 1231/411
CTA TTG GGT TAC TCA TCA GAC ACC GTT TTT TCA ATC CAT GTC GAT AAA GAG GAC GGC TCA
L L G Y S S D T V F S I H V D K E D G S
1261/421 1291/431
CCC ATT AGT GGA AGC GCT CTA GCT CCT CCT TTT CCA ACT CCC TGC ACT CTA AGA ACA GCA
P I S G S A L A P P F P T P C T L R T A
1321/441 1351/451
CTA ACA CGA TAC GCT GAT CTG TTG AAT TCT CCC AAG AAG GCT GCT CTG CAT GCT TTG GCT
L T R Y A D L L N S P K K A A L H A L A
1381/461 1411/471
GCT TAT GCA TCC GAT CCA AAG GAA GCG GAG CGA CTA AGG TAT CTT GCG TCT CCT GCT GGG
A Y A S D P K E A E R L R Y L A S P A G
1441/481 1471/491
AAG GAC GAA TAC GCC CAG TGG ATA GTA GCT AGT CAG AGA AGT CTG CTA GTG GTC ATG GCT
K D E Y A Q W I V A S Q R S L L V V M A
1501/501 1531/511
GAA TTC CCA TCA GCA AAG GCT CCA ATT GGG GTT TTC TTT GCA GCA GTA GCT CCT CGC TTG
E F P S A K A P I G V F F A A V A P R L
1561/521 1591/531
CTG CCA AGA TAC TAT TCT ATT TCA TCT TCC AAT AGG ATG GTA CCA TCT AGG ATT CAT GTC
L P R Y Y S I S S S N R M V P S R I H V
1621/541 1651/551
ACA TGT GCA TTG GTG CAT GAA AAA ACA CCG GCA GGT CGG GTT CAC AAA GGA GTG TGT TCA
T C A L V H E K T P A G R V H K G V C S
1681/561 1711/571
ACC TGG ATG AAG AAT TCT GTG TCT TTG GAA GAA AAC CAT GAT TGC AGC AGC TGG GCA CCA
T W M K N S V S L E E N H D C S S W A P
1741/581 1771/591
ATC TTT GTC AGG CAA TCC AAC TTC AAA CTT CCT GCT GAT TCT ACA GTA CCA ATT ATA ATG
I F V R Q S N F K L P A D S T V P I I M
1801/601 1831/611
ATT GGT CCT GGG ACT GGA TTA GCT CCC TTT AGG GGA TTC ATG CAG GAG CGA TTA GCT CTG
I G P G T G L A P F R G G F M Q E R L A L
1861/621 1891/631
AAG AAT TCT GGT GTA GAA TTG GGA CCC GCT ATC CTC TTC TTT GGA TGC AGA AAC AGA CAG
K N S G V E L G P A I L F F G C R N R Q
1921/641 1951/651
ATG GAT TAC ATA TAT GAA GAG GAG CTA AAC AAC TTT GTG AAA GAG GGA GCT ATC TCC GAA
M D Y I Y E E E L N N F V K E G A I S E
1981/661 2011/671
GTT GTT GTT GCT TTC TCA CGT GAG GGA GCT ACC AAG GAA TAC GTA CAA CAT AAA ATG GCG
V V V A F S R E G A T K E Y V Q H K M A
2041/681 2071/691

16/20

FIG. 9b (3)

GAG AAG GCT TCC TAC ATC TGG GAA ATG ATC TCT CAA GGT GCT TAT CTT TAT GTA TGT GGT
E K A S Y I W E M I S Q G A Y L Y V C G
2101/701 2131/711
GAT GCC AAG GGC ATG GCT AGA GAC GTA CAT CGA ACT CTC CAC ACC ATT GCC CAG GAA CAG
D A K G M A R D V H R T L H T I A Q E Q
2161/721 2191/731
GGA TCT TTG GAC AAC TCG AAG ACC GAA AGC TTG GTG AAG AAT CTA CAG ATG GAT GGA AGG
G S L D N S K T E S L V K N L Q M D G R
2221/741 2251/751
TAT CTA CGT GAT GTG TGG TGA TTG ATT TTT TCA GCA CGG TTA CAA TCT AGC TTC ATC AAA
Y L R D V W * L I F S A R L Q S S F I K
2281/761 2311/771
GAA CGC GCT TGA GAA GCA TAA ATC TTA GTT GCA GAG ATG TTG ATT TCA GAA GAA ATG CTT
E R A * E A * I L V A E M L I S E E M L
2341/781 2371/791
TAT ATA CTT GAG GTA GCG GAC ATT AAT CCT TTT CTC TCT CTC TAA ACT GTT AAT CCT GTA
Y I L E V A D I N P F L S L * T V N P V
2401/801 2431/811
AAA AAG GGA TTG CTG TTT GTG TTT GCT CGC AAT CAA TTA AGT TAT ATT CTT TGG TCT ATG
K K G L L F V F A R N Q L S Y I L W S M
2461/821 2491/831
GCA TTC GTT AGA CAA ATA TAT TAA CGA GTT TGT CCG TTA TAT ATG ACA TAT GAA ACA AAA
A F V R Q I Y * R V C P L Y M T Y E T K
2521/841 2551/851
GAA CTT CTG TTT GGA GGA AGA GAA AAA AAA AAA AAA AA
E L L F G G R E K K K K

17/20

FIG. 10a (1)

1	AAGCTTCAGAGTCTCTGCTAATT	ATG	GGT	TCG	AAT	AAT	TTA	GCT	AAT	TCG	ATT	GAA	TCG	ATG	TTA	65					
1		M	G	S	N	N	L	A	N	S	I	E	S	M	L	14					
66	GGA	ATA	TCA	ATA	GGA	TCA	GAA	TAT	ATT	TCT	GAC	CCA	ATT	TTC	ATT	ATG	GTC	ACA	ACT	GTA	125
15	G	I	S	I	G	S	E	Y	I	S	D	P	I	F	I	M	V	T	T	V	34
126	GCT	TCA	ATG	CTG	ATT	GGA	TTT	GGT	TTC	TTC	GCA	TGT	ATG	AAA	TCT	TCG	TCT	TCT	CAA	TCA	185
35	A	S	M	L	I	G	F	G	F	F	A	C	M	K	S	S	S	S	Q	S	54
186	AAA	CCT	ATT	GAA	ACT	TAT	AAA	CCA	ATA	ATT	GAT	AAA	GAA	GAA	GAG	GAG	ATT	GAA	GTT	GAT	245
55	K	P	I	E	T	Y	K	P	I	I	D	K	E	E	E	E	I	E	V	D	74
246	CCT	GGT	AAA	ATT	AAG	CTC	ACT	ATA	TTT	TTT	GGT	ACT	CAG	ACT	GGT	ACT	GCT	GAA	GGA	TTT	305
75	P	G	K	I	K	L	T	I	F	F	G	T	Q	T	G	T	A	E	G	F	94
306	GCT	AAG	GCA	TTG	GCA	GAA	GAA	ATT	AAG	GCA	AAG	TAC	AAG	AAA	GCA	GTT	GTT	AAA	GTA	GTT	365
95	A	K	A	L	A	E	E	I	K	A	K	Y	K	K	A	V	V	K	V	V	114
366	GAC	CTG	GAT	GAC	TAT	GCA	GCC	GAG	GAT	GAT	CAA	TAT	GAA	GAG	AAA	TTA	AAG	AAA	GAG	TCT	425
115	D	L	D	D	Y	A	A	E	D	D	Q	Y	E	E	K	L	K	K	E	S	134
426	TTG	GTG	TTT	TTC	ATG	GTA	GCC	ACT	TAT	GGT	GAT	GGT	GAG	CCA	ACT	GAC	AAT	GCT	GCG	AGA	485
135	L	V	F	F	M	V	A	T	Y	G	D	G	E	P	T	D	N	A	A	R	154
486	TTT	TAC	AAA	TGG	TTC	ACT	CAG	GAA	CAT	GAA	AGG	GGA	GAG	TGG	CTT	CAG	CAA	CTA	ACT	TAT	545
155	F	Y	K	W	F	T	Q	E	H	E	R	G	E	W	L	Q	Q	L	T	Y	174
546	GGT	GTT	TTT	GGT	TTG	GGT	AAC	CGT	CAA	TAC	GAG	CAT	TTC	AAC	AAG	ATC	GCG	GTA	GAT	GTG	605
175	G	V	F	G	L	G	N	R	Q	Y	E	H	F	N	K	I	A	V	D	V	194
606	GAT	GAG	CAA	CTC	GGT	AAA	CAA	GGT	GCA	AAG	CGC	ATT	GTT	CAA	GTG	GGG	CTC	GGT	GAC	GAT	665
195	D	E	Q	L	G	K	Q	G	A	K	R	I	V	Q	V	G	L	G	D	D	214
666	GAT	CAA	TGC	ATT	GAA	GAT	GAT	TTT	ACT	GCT	TGG	CGA	GAA	TTG	TTG	TGG	ACT	GAA	TTG	GAT	725
215	D	Q	C	I	E	D	D	F	T	A	W	R	E	L	L	W	T	E	L	D	234
726	CAG	TTG	CTC	AAA	GAT	GAG	GAT	GCT	GCT	CCT	TCA	GTG	GCT	ACA	CCG	TAT	ATT	GCT	ACT	GTT	785
235	Q	L	L	K	D	E	D	A	A	P	S	V	A	T	P	Y	I	A	T	V	254
786	CCT	GAA	TAC	AGG	GTA	GTG	ATT	CAC	GAA	ACT	ACG	GTC	GCG	GCT	CTG	GAT	GAT	AAA	CAC	ATA	845
255	P	E	Y	R	V	V	I	H	E	T	T	V	A	A	L	D	D	K	H	I	274
846	AAT	ACT	GCT	AAC	GGC	GAT	GTT	GCA	TTT	GAT	ATT	CTC	CAT	CCT	TGC	AGA	ACC	ATT	GTT	GCT	905
275	N	T	A	N	G	D	V	A	F	D	I	L	H	P	C	R	T	I	V	A	294
906	CAA	CAA	AGA	GAG	CTC	CAC	AAA	CCC	AAG	TCT	GAT	AGA	TCC	TGT	ATA	CAT	CTG	GAG	TTC	GAC	965
295	Q	Q	R	E	L	H	K	P	K	S	D	R	S	C	I	H	L	E	F	D	314
966	ATA	TCA	GGC	TCT	TCC	CTT	ACA	TAT	GAG	ACT	GGA	GAT	CAT	GTT	GGT	GTT	TAT	GCT	GAG	AAC	1025
315	I	S	G	S	S	L	T	Y	E	T	G	D	H	V	G	V	Y	A	E	N	334
1026	TGC	GAT	GAA	ACT	GTC	GAG	GAA	GCA	GGG	AAG	CTG	TTG	GGT	CAA	CCC	CTG	GAT	TTG	CTG	TTT	1085
335	C	D	E	T	V	E	E	A	G	K	L	L	G	Q	P	L	D	L	L	F	354
1086	TCA	ATT	CAC	ACG	GAT	AAA	GAA	GAC	GGG	TCA	CCC	CAG	GGA	AGC	TCA	TTA	CCA	CCT	CCT	TTC	1145
355	S	I	H	T	D	K	E	D	G	S	P	Q	G	S	S	L	P	P	P	F	374

1146	CCA	GGT	CCT	TGC	ACC	TTA	CGA	TCT	GCC	CTA	GCA	CGC	TAT	GCT	GAT	CTT	TTG	AAT	CCT	CCT	1205
375	P	G	P	C	T	L	R	S	A	L	A	R	Y	A	D	L	L	N	P	P	394
1206	AGA	AAG	GCT	TCT	CTG	ATT	GCT	CTG	TCC	GCT	CAT	GCA	TCT	GTA	CCC	AGT	GAA	GCA	GAG	AGA	1265
395	R	K	A	S	L	I	A	L	S	A	H	A	S	V	P	S	E	A	E	R	414
1266	TTG	CGC	TTT	TTG	TCA	TCA	CCT	CTG	GGA	AAG	AAT	GAG	TAT	TCA	AAA	TGG	GTA	GTT	GGA	AGT	1325
415	L	R	F	L	S	S	P	L	G	K	N	E	Y	S	K	W	V	V	G	S	434
1326	CAG	AGG	AGT	CTT	TTG	GAG	ATC	ATG	GCC	GAG	TTT	CCA	TCA	GCA	AAA	CCC	CCT	CTT	GGT	GTT	1385
435	Q	R	S	L	L	E	I	M	A	E	F	P	S	A	K	P	P	L	G	V	454
1386	TTC	TTT	GCT	GCA	GTA	GCC	CCT	CGC	TTA	CCG	CCT	CGA	TAC	TAT	TCT	ATC	TCA	TCC	TCT	CCT	1445
455	F	F	A	A	V	A	P	R	L	P	P	R	Y	Y	S	I	S	S	S	P	474
1446	AAG	TTT	GCT	CCC	TCA	AGA	ATT	CAT	GTG	ACG	TGT	GCT	TTA	GTA	TAT	GGT	CAA	AGC	CCT	ACC	1505
475	K	F	A	P	S	R	I	H	V	T	C	A	L	V	Y	G	Q	S	P	T	494
1506	GGA	AGG	GTT	CAC	CGA	GGA	GTG	TGT	TCG	ACA	TGG	ATG	AAG	CAT	GCA	GTT	CCT	CAG	GAT	AGC	1565
495	G	R	V	H	R	G	V	C	S	T	W	M	K	H	A	V	P	Q	D	S	514
1566	TGG	GCT	CCT	ATT	TTT	GTT	CGA	ACG	TCA	AAC	TTC	AAG	TTA	CCA	GCT	GAC	CCC	TCA	ACT	CCA	1625
515	W	A	P	I	F	V	R	T	S	N	F	K	L	P	A	D	P	S	T	P	534
1626	ATT	ATC	ATG	GTG	GGA	CCT	GGT	ACA	GGG	TTA	GCT	CCT	TTC	AGA	GGA	TTT	CTG	CAG	GAA	AGA	1685
535	I	I	M	V	G	P	G	T	G	L	A	P	F	R	G	F	L	Q	E	R	554
1686	ATG	GCC	CTC	AAG	GAA	AAT	GGT	GCT	CAA	CTT	GGC	CCA	GCA	GTG	CTC	TTT	TTC	GGA	TGT	AGG	1745
555	M	A	L	K	E	N	G	A	Q	L	G	P	A	V	L	F	F	G	C	R	574
1746	AAT	CGT	AAT	ATG	GAC	TTC	ATT	TAT	GAA	GAC	GAA	CTA	AAC	AAC	TTC	GTG	GAA	CGA	GGA	GTA	1805
575	N	R	N	M	D	F	I	Y	E	D	E	L	N	N	F	V	E	R	G	V	594
1806	ATT	TCG	GAG	CTA	GTT	ATT	GCC	TTT	TCA	CGT	GAA	GGG	GAA	AAG	AAG	GAA	TAT	GTT	CAA	CAT	1865
595	I	S	E	L	V	I	A	F	S	R	E	G	E	K	K	E	Y	V	Q	H	614
1866	AAG	ATG	ATG	GAG	AAA	GCA	ACG	GAT	GTA	TGG	AAT	GTG	ATA	TCA	GGG	GAC	GGT	TAT	CTC	TAT	1925
615	K	M	M	E	K	A	T	D	V	W	N	V	I	S	G	D	G	Y	L	Y	634
1926	GTG	TGT	GGT	GAT	GCC	AAG	GGA	ATG	GCC	AGA	GAT	GTC	CAT	CGC	ACG	TTG	CAT	ACC	ATT	GCC	1985
635	V	C	G	D	A	K	G	M	A	R	D	V	H	R	T	L	H	T	I	A	654
1986	CAA	GAA	CAG	GGA	CCC	ATG	GAA	TCA	TCT	GCT	GCC	GAA	GCT	GCA	GTA	AAG	AAA	CTC	CAA	GTT	2045
655	Q	E	Q	G	P	M	E	S	S	A	A	E	A	A	V	K	K	L	Q	V	

19/20

FIG. 10b (1)

```
1 tgcagccccgggggatccgccCT  ATG GAA CAA ACT GCG GTT AAA GTC TCT TTG TTT GAT CTA TTT 64
1                               M  E  Q  T  A  V  K  V  S  L  F  D  L  F  14

65 TCT TCG ATA CTT AAT GGA AAG TTG GAT CCG TCG AAC TTT TCT TCA GAT TCA AGT GCT GCT 124
15 S  S  I  L  N  G  K  L  D  P  S  N  F  S  S  D  S  S  A  A  34

125 ATT TTG ATT GAA AAT CGT GAG ATT TTA ATG ATC TTA ACA ACT GCT ATT GCT GTT TTT ATC 184
35 I  L  I  E  N  R  E  I  L  M  I  L  T  T  A  I  A  V  F  I  54

185 GGT TGT GGT TTT CTC TAC GTT TGG AGA AGA TCT TCA AAT AAG TCG AGT AAA ATT GTT GAA 244
55 G  C  G  F  L  Y  V  W  R  R  S  S  N  K  S  S  K  I  V  E  74

245 ACT CAG AAA TTG ATC GTT GAA AAG GAA CCA GAA CCT GAA GTT GAT GAT GGA AAG AAG AAG 304
75 T  Q  K  L  I  V  E  K  E  P  E  P  E  V  D  D  G  K  K  K  94

305 GTT ACT ATC TTC TTT GGT ACT CAA ACT GGT ACA GCT GAA GGA TTC GCA AAG GCA CTT GCT 364
95 V  T  I  F  F  G  T  Q  T  G  T  A  E  G  F  A  K  A  L  A  114

365 GAA GAA GCA AAA GCA AGA TAT GAA AAG GCA ATC TTT AAA GTG ATT GAT CTG GAT GAT TAC 424
115 E  E  A  K  A  R  Y  E  K  A  I  F  K  V  I  D  L  D  D  Y  134

425 GGA GCA GAT GAT GAT GAA TTC GAA GAG AAA TTG AAA AAG GAA ACT ATA GCT CTT TTC TTT 484
135 G  A  D  D  D  E  F  E  E  K  L  K  K  E  T  I  A  L  F  F  154

485 TTG GCT ACC TAT GGA GAT GGT GAA CCT ACA GAT AAT GCT GCA AGA TTT TAT AAA TGG TTC 544
155 L  A  T  Y  G  D  G  E  P  T  D  N  A  A  R  F  Y  K  W  F  174

545 ACA GAG GGA GAG AGG GAA ATG TGG CTC CAG AAT CTT CAA TTT GGT GTC TTC GGT CTA GGC 604
175 T  E  G  E  R  E  M  W  L  Q  N  L  Q  F  G  V  F  G  L  G  194

605 AAT AGA CAG TAT GAG CAT TTC AAT AAG GTG GCA AAG GAG GTG GAC GAG ATA CTC ACT GAA 664
195 N  R  Q  Y  E  H  F  N  K  V  A  K  E  V  D  E  I  L  T  E  214

665 CAG GGT GGG AAG CGT ATT GTT CCC GTG GGT CTA GGA GAT GAT GAT CAA TGC ATA GAA GAT 724
215 Q  G  G  K  R  I  V  P  V  G  L  G  D  D  D  Q  C  I  E  D  234

725 GAT TTC ACT GCG TGG CGG GAG TTG GTA TGG CCT GAA TTG GAT CAG TTG CTC CTT GAT GAA 784
235 D  F  T  A  W  R  E  L  V  W  P  E  L  D  Q  L  L  L  D  E  254

785 AGT GAT AAA ACA TCT GTT TCT ACT CCT TAC ACT GCC ATC GTA CCA GAA TAC AGG GTA GTA 844
255 S  D  K  T  S  V  S  T  P  Y  T  A  I  V  P  E  Y  R  V  V  274

845 TTC CAT GAT GCT ACT GAT GCA TCA CTA CAA GAC AAA AAC TGG AGC AAT GCA AAT GGC TAC 904
275 F  H  D  A  T  D  A  S  L  Q  D  K  N  W  S  N  A  N  G  Y  294

905 ACT GTT TAC GAC GTT CAA CAC CCA TGC AGA GCC AAT GTC GTT GTA AAG AAG GAG CTT CAC 964
295 T  V  Y  D  V  Q  H  P  C  R  A  N  V  V  V  K  K  E  L  H  314

965 ACT CCA GTA TCT GAT CGT TCT TGT ATT CAT CTG GAA TTT GAC ATT TCT GGC ACT GGG CTC 1024
315 T  P  V  S  D  R  S  C  I  H  L  E  F  D  I  S  G  T  G  L  334

1025 ACG TAT GAA ACA GGA GAC CAT GTC GGT GTT TAC TCT GAG AAT TGT GTT GAA GTT GTC GAG 1084
335 T  Y  E  T  G  D  H  V  G  V  Y  S  E  N  C  V  E  V  V  E  354

1083 GAA GCA GAG AGG CTA TTG GGT TAC TCA TCA GAC ACC GTT TTT TCA ATC CAT GTC GAT AAA 1144
355 E  A  E  R  L  L  G  Y  S  S  D  T  V  F  S  I  H  V  D  K  374
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20/20

FIG. 10b (2)

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1145 GAG GAC GGC TCA CCC ATT AGT GGA AGC GCT CTA GCT CCT CCT TTT CCA ACT CCC TGC ACT 1204
375 E D G S P I S G S A L A P P F P T P C T 394

1205 CTA AGA ACA GCA CTA ACA CGA TAC GCT GAT CTG TTG AAT TCT CCC AAG AAG GCT GCT CTG 1264
395 L R T A L T R Y A D L L N S P K K A A L 414

1265 CAT GCT TTG GCT GCT TAT GCA TCC GAT CCA AAG GAA GCG GAG CGA CTA AGG TAT CTT GCG 1324
415 H A L A A Y A S D P K E A E R L R Y L A 434

1325 TCT CCT GCT GGG AAG GAC GAA TAC GCC CAG TGG ATA GTA GCT AGT CAG AGA AGT CTG CTA 1384
435 S P A G K D E Y A Q W I V A S Q R S L L 454

1385 GTG GTC ATG GCT GAA TTC CCA TCA GCA AAG GCT CCA ATT GGG GTT TTC TTT GCA GCA GTA 1444
455 V V M A E F P S A K A P I G V F F A A V 474

1445 GCT CCT CGC TTG CTG CCA AGA TAC TAT TCT ATT TCA TCT TCC AAT AGG ATG GTA CCA TCT 1504
475 A P R L L P R Y Y S I S S S N R M V P S 494

1505 AGG ATT CAT GTC ACA TGT GCA TTG GTG CAT GAA AAA ACA CCG GCA GGT CGG GTT CAC AAA 1564
495 R I H V T C A L V H E K T P A G R V H K 514

1565 GGA GTG TGT TCA ACC TGG ATG AAG AAT TCT GTG TCT TTG GAA GAA AAC CAT GAT TGC AGC 1624
515 G V C S T W M K N S V S L E E N H D C S 534

1625 AGC TGG GCA CCA ATC TTT GTC AGG CAA TCC AAC TTC AAA CTT CCT GCT GAT TCT ACA GTA 1684
535 S W A P I F V R Q S N F K L P A D S T V 554

1685 CCA ATT ATA ATG ATT GGT CCT GGG ACT GGA TTA GCT CCC TTT AGG GGA TTC ATG CAG GAG 1744
555 P I I M I G P G T G L A P F R G F M Q E 574

1745 CGA TTA GCT CTG AAG AAT TCT GGT GTA GAA TTG GGA CCC GCT ATC CTC TTC TTT GGA TGC 1804
575 R L A L K N S G V E L G P A I L F F G C 594

1805 AGA AAC AGA CAG ATG GAT TAC ATA TAT GAA GAG GAG CTA AAC AAC TTT GTG AAA GAG GGA 1864
595 R N R Q M D Y I Y E E E L N N F V K E G 614

1865 GCT ATC TCC GAA GTT GTT GTT GCT TTC TCA CGT GAG GGA GCT ACC AAG GAA TAC GTA CAA 1924
615 A I S E V V V A F S R E G A T K E Y V Q 634

1925 CAT AAA ATG GCG GAG AAG GCT TCC TAC ATC TGG GAA ATG ATC TCT CAA GGT GCT TAT CTT 1984
635 H K M A E K A S Y I W E M I S Q G A Y L 654

1985 TAT GTA TGT GGT GAT GCC AAG GGC ATG GCT AGA GAC GTA CAT CGA ACT CTC CAC ACC ATT 2044
655 Y V C G D A K G M A R D V H R T L H T I 674

2045 GCC CAG GAA CAG GGA TCT TTG GAC AAC TCG AAG ACC GAA AGC TTG GTG AAG AAT CTA CAG 2104
675 A Q E Q G S L D N S K T E S L V K N L Q 694

2105 ATG GAT GGA AGG TAT CTA CGT GAT GTG TGG TGA TTGgggctagagcggcc 2154
695 M D G R Y L R D V W * 705

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